



SPORT COPTER M2 FUEL SYSTEM



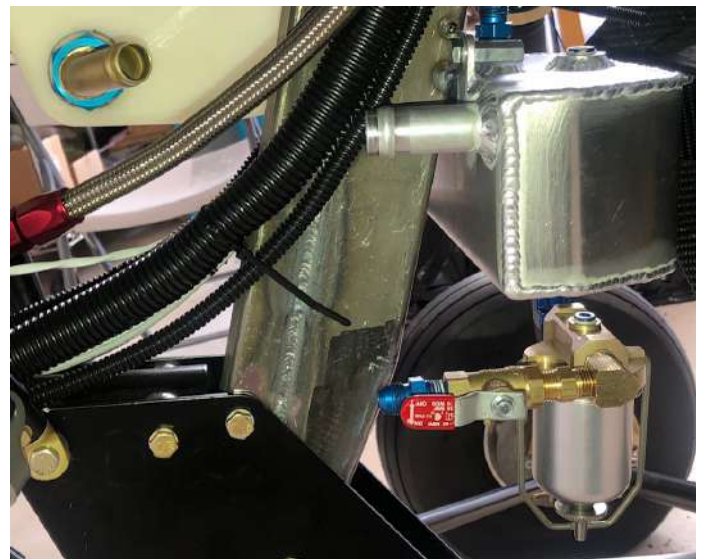
Every Sport Copter M2 has a pair of 11 gallon (usable) rota-molded cross-linked HDPE fuel cells, which feed into an aluminum header tank.

The right side contains the fuel level sensor (shown in photo). The left side fuel cell has the filler cap (with a location and generous I.D. so that the very bottom of the cell can be seen). Unusable fuel per cell is nil, about 0.1 gallon (1.3 oz).

The fuel cells (gray in prod. models) are mounted by 4 straps (2 nylon webbing, 2 aluminum) with our custom 4130 chrome-moly steel hardware, which will retain the fuel cells during forces up to 10G.



At the top is a 2" hole with removable bolted flange to make for easy inspection and cleaning.



The cells equalize quickly during filling, and remain so in flight due to our custom 0.5" I.D. elbow of gold-anodized aircraft aluminum. We located the threads on the *outside* for simple service. (Many gyro mfg. put the nut on the inside with a special factory tool, which customers don't have!) Inside the flange will be a wire thimble screen of certified material and size. **The O-ringed elbow design is from our proven M912—no leaks!** Also pictured is the TIG-welded header tank and gascolator (within easy access for preflight inspection). There is also a **rollover check valve** (not shown) to prevent fuel spillage during an accident where the gyro may rest on its side or upside-down. No other gyro to our knowledge has this important safety feature!

All production M2s will have gray fuel cells. Below is a right-side cell, fresh from its factory without any of our processing. Its carefully designed shape maximizes fuel capacity within the M2 body and frame structure. Yet, with the quickly detachable body side panels, the fuel cells can be inspected or removed in the field. Much about the Sport Copter M2 is modular for ease of repair or replacement.



In the M2, you're not sitting directly on top of the fuel tank ,as in other gyros. Rather, the fuel is *outside* the cabin and separated from the occupants by a thick carbon-fiber bulkhead/rollbar with engine firewall layer.

In total, this is the most rugged and safest fuel system on any gyro today!